

Table 2
Trees Suitable for Establishment

Appendix I
WV 612

TREES	Soil Drainage Class ¹	Shade Tolerance ²	Height at 20 Years ³	Aprox. Height at Maturity ⁴	Native ⁵	Suitable Use(s)					Additional Plant Information Available ⁹	Remarks	Commercial Availability ¹⁰	
						Windbreaks Screens Barriers or Other ⁶	Wildlife ⁷			Wildlife Spacing				Wood Production Spacing ⁸
							Food	Cover	Corridors					
Alder, European Black (<i>Alnus glutinosa</i>)	Well - Moderately Well	Intermediate	40 ft	60 ft	No	8-18 ft *			X	8-12 ft		Fact Sheet	Excellent for reclamation. Nitrogen fixer. Good for hedgerow and windbreaks where non-natives are acceptable.	Readily
Ash, Green (<i>Fraxinus pennsylvanica</i>)	Moderately Well - Poorly	Intermediate	50 ft	80 ft	Yes	8-18 ft	X		X	8-12 ft		Fact Sheet	The seeds are eaten by a number of birds and mammals. Extensively planted as a shade and ornamental tree.	Readily
Ash, White (<i>Fraxinus americana</i>)	Well - Somewhat Poorly	Intermediate	50 ft	80 ft	Yes	8-18 ft	X	X	X	8-12 ft	20 X 20 ft	Plant Guide	Excellent all purpose ornamental, wildlife, and shade tree. Has commercial timber value.	Readily
Basswood (<i>Tilia americana</i>)	Well - Moderately Well	Intermediate	45 ft	80 ft	Yes	8-18 ft	X		X	8-12 ft	10-15 ft	Plant Guide	Provides good browse. The buds are important for birds and deer in winter. Planted as a shade tree or ornamental.	Readily
Birch, Black (<i>Betula nigra</i>)	Well - Somewhat Poorly	Intolerant	40 ft	80 ft	Yes			X	X	8-12 ft		Fact Sheet	Native riparian tree. Its young twigs, buds, foliage and seeds are used by a variety of wildlife.	Somewhat Available
Blackgum (<i>Nyssa sylvatica</i>)	Well - Somewhat Poorly	Tolerant	30 ft	95 ft	Yes		X			8-12 ft		Fact Sheet	Black bears, foxes, wood ducks, wild turkeys, robins, brown thrashers, thrushes, and flickers frequently eat the fruit.	Readily
Boxelder (<i>Acer negundo</i>)	Well - Poorly	Intermediate	35 ft	60 ft	Yes				X	8-12 ft		Plant Guide	Very quick growing. Found along streams and frequently flooded areas. Relatively short lived and often disease prone.	Readily
Cedar, Northern White (<i>Thuja occidentalis</i>)	Well - Somewhat Poorly	Intermediate	25 ft	50 ft	Yes	8-16 ft			X	8-12 ft		Plant Guide	Also called Arborvitae. Popular ornamental for screens and hedgerows in limestone areas. Provides some nesting cover.	Readily
Cedar, Atlantic White (<i>Chamaecyparis thyoides</i>)	Moderately Well - Poorly	Tolerant	20 ft	90 ft	No	8-16 ft			X	8-12 ft		Plant Guide Fact Sheet	Similar to Arborvitae. A coastal species not native to WV. Tolerant of wet conditions.	Readily
Cherry, Black (<i>Prunus serotina</i>)	Well - Somewhat Poorly	Intolerant	40 ft	100 ft	Yes	8-18 ft	X		X	8-12 ft	20 X 20 ft	Plant Guide	Valuable food source for many wildlife species. Used for commercial timber and ornamental purposes on a wide variety of soils.	Readily
Chestnut, Chinese (<i>Castanea mollissima</i>)	Well - Moderately Well	Intolerant	25 ft	70 ft	No	6-14 ft	X			8-12 ft		No	Mostly planted as an ornamental. Some wildlife utilize the chestnuts.	Readily
Cucumber-Tree (<i>Magnolia acuminata</i>)	Well - Moderately Well	Intolerant	40 ft	100 ft	Yes	8-18 ft			X	8-12 ft	10-15 ft	No	Beautiful native tree common throughout WV. Minimal wildlife value. Sometimes used as an ornamental and timber species.	Readily
Cottonwood, Eastern (<i>Populus deltoides</i>)	Well - Somewhat Poorly	Intermediate	50 ft	120 ft	Yes	8-18 ft			X	8-12 ft		Fact Sheet	Fast growing and used in reclamation. Hybrids make good selections for windbreaks in multi-row installations.	Readily
Fir, Douglas (<i>Pseudotsuga menziesii</i>)	Well - Moderately Well	Intermediate	40 ft	200 ft	No	8-16 ft			X	8-12 ft		Plant Guide Fact Sheet	One of the world's most important timber species. Excellent as wildlife, windbreak, and Christmas tree.	Readily
Hackberry (<i>Celtis occidentalis</i>)	Well - Somewhat Poorly	Intermediate	40 ft	70 ft	Yes	8-18 ft	X		X	8-12 ft		Fact Sheet	Birds use the mature trees for nesting sites and feed on the fruit. Young stands also provide shelter for game birds and rabbits.	Readily
Hemlock, Eastern (<i>Tsuga canadensis</i>)	Well - Somewhat Poorly	Tolerant	20 ft	100 ft	Yes	8-16 ft			X	8-12 ft		Plant Guide	This tree is versatile as a hedge, large timber species, screen and wildlife tree. Different cultivars exist. Native and attractive.	Readily
Hickory, Shagbark (<i>Carya ovata</i>)	Well - Moderately Well	Intermediate	15 ft	90 ft	Yes		X			8-12 ft		No	Develops deep taproot in the first few years. Needs deep alluvial soils. Slow growing. Excellent nut producer. Some timber value.	Readily
Honeylocust (<i>Gleditsia triacanthos</i>)	Well - Somewhat Poorly	Intolerant	35 ft	80 ft	No	8-18 ft						Plant Guide	Planted as a hardy and fast-growing ornamental. Minimal wildlife value. Highly regarded in urban settings with many cultivars.	Readily
Larch, Japanese (<i>Larix kaempferi</i>)	Well - Somewhat Poorly	Intolerant	20 ft	100 ft	No	6-14 ft *						No	Deciduous conifer used primarily as an ornamental and timber trainer. Very minimal wildlife value.	Readily
Locust, Black (<i>Robinia pseudoacacia</i>)	Well - Somewhat Poorly	Intermediate	55 ft	80 ft	Yes	8-18 ft *	X		X	8-12 ft		Fact Sheet	Easy to establish. Early successional species and may be relatively short lived. Bee attractant. Nitrogen fixing species.	Readily
Maple, Red (<i>Acer rubrum</i>)	Well - Poorly	Intermediate	40 ft	90 ft	Yes	8-18 ft			X	8-12 ft		Fact Sheet Plant Guide	Valued as native ornamental. Early blooming and important as an early pollinator for many insects. Grows in almost any condition.	Readily
Maple, Silver (<i>Acer saccharinum</i>)	Moderately Well - Poorly	Intermediate	45 ft	80 ft	Yes	8-18 ft			X	8-12 ft		Plant Guide Fact Sheet	Important as cavity tree and somewhat important as a wildlife food source. May be disease prone and susceptible to storm damage.	Readily
Maple, Sugar (<i>Acer saccharum</i>)	Well - Somewhat Poorly	Tolerant	20 ft	100 ft	Yes	6-14 ft			X	8-12 ft		Plant Guide	Popular and long-lived shade and ornamental tree. Tolerates a wide range of conditions. Important for cavity nesting wildlife.	Readily
Mulberry, Red (<i>Morus rubra</i>)	Well - Somewhat Poorly	Intermediate	45 ft	70 ft	Yes		X		X	8-12 ft		No	Excellent wildlife tree for a variety of species especially birds. Sometimes hard to establish. Very site specific.	Somewhat Available
Oak, Chinquapin (<i>Quercus muehlenbergii</i>)	Well - Moderately Well	Intolerant	40 ft	80 ft	Yes	8-18 ft	X		X	8-12 ft		No	Rare throughout its range. Site specific to alkaline soils and limestone outcropped areas. Good riparian species.	Readily
Oak, Northern Red (<i>Quercus rubra</i>)	Well - Moderately Well	Intermediate	35 ft	100 ft	Yes	8-18 ft	X		X	8-12 ft	20 X 20 ft	Plant Guide	One of our most important and handsome oaks. Important as a wildlife food source, timber species and ornamental.	Readily
Oak, Overcup (<i>Quercus lyrata</i>)	Moderately Well - Poorly	Intermediate	30 ft	80 ft	No	8-18 ft	X		X	8-12 ft	20 X 20 ft	Plant Guide	Often planted for timber and as an ornamental and to improve wildlife habitat for bottomland restoration. Native to the mid-west.	Readily

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Oak, Pin (<i>Quercus palustris</i>)	Moderately Well - Poorly	Intolerant	40 ft	100 ft	Yes	8-18 ft	X			8-12 ft		Fact Sheet	Adapted to wetter sites. Good mast producer and attractive ornamental. Utilized by various wildlife especially wood ducks.	Readily
Oak, Post (<i>Quercus stellata</i>)	Well - Moderately Well	Intermediate	25 ft	80 ft	Yes	8-18 ft	X		X	8-12 ft		No	Tolerates harsh conditions and drought. Slow growing and may be susceptible to chestnut blight. Sometimes used as an ornamental.	Somewhat Available
Oak, Shingle (<i>Quercus imbricaria</i>)	Well - Moderately Well	Intolerant	30 ft	45 ft	Yes	8-18 ft			X	8-12 ft		No	An ornamental and shade tree, it is suitable for hedges, screens and windbreaks. Relatively low wildlife value among oaks.	Readily
Oak, Sawtooth (<i>Quercus acutissima</i>)	Well - Moderately Well	Intermediate	50 ft	70 ft	No	8-18 ft	X		X	15-20 ft		Fact Sheet	Wildlife oak that produces heavy amounts of small acorns attractive to many animal species. Relatively fast growing.	Somewhat Available
Oak, Swamp White (<i>Quercus bicolor</i>)	Somewhat Poorly - Poorly	Intermediate	30 ft	100 ft	Yes		X		X	8-12 ft		Plant Guide	Requires moist acidic conditions. Important food for wildlife such as squirrels, black bear, ducks and turkey. Often hybridizes.	Readily
Oak, White (<i>Quercus alba</i>)	Well - Moderately Well	Intermediate	30 ft	100 ft	Yes	8-18 ft	X		X	8-12 ft	20 X 20 ft	Fact Sheet	Extremely important as a timber and wildlife food tree. Slow growing and often difficult to establish.	Readily
Paulownia, Royal (<i>Paulownia tomentosa</i>)	Well - Moderately Well	Intermediate	60 ft	70 ft	No						20 X 20 ft	No	Rapidly growing introduced species. Specialized commercial timber species. Often escapes and has no known wildlife value.	Readily
Persimmon, Common (<i>Diospyros virginiana</i>)	Well - Somewhat Poorly	Intermediate	25 ft	50 ft	Yes		X			8-12 ft		Plant Guide	Used by raccoon, opossum, and various birds, including quail, wild turkey and cedar waxwing. Slow growing and difficult to transplant.	Somewhat Available
Pine, Austrian Black (<i>Pinus nigra</i>)	Well - Somewhat Poorly	Intermediate	35 ft	100 ft	No	8-16 ft		X		6-12 ft		No	Non-native used mainly for ornamentals, screens and as a reclamation plant. Used as winter cover for various bird species.	Readily
Pine, Eastern White (<i>Pinus strobus</i>)	Well - Somewhat Poorly	Intolerant	40 ft	130 ft	Yes	8-16 ft		X	X	6-12 ft	6 - 8 ft	Fact Sheet	Squirrels and 16 species of songbirds have been known to eat the seed. Native pine with commercial timber and ornamental value.	Readily
Pine, Loblolly (<i>Pinus taeda</i>)	Well - Somewhat Poorly	Intolerant	50 ft	100 ft	No	8-16 ft		X	X	6-12 ft	6 - 8 ft	No	Extremely important timber species. Provides some cover and browse in winter months to wildlife.	Readily
Pine, Red (<i>Pinus resinosa</i>)	Well - Moderately Well	Intolerant	30 ft	80 ft	Yes	8-16 ft		X	X	6-12 ft	6 - 8 ft	No	Found primarily at higher elevations in the eastern counties. Used for ornamentals and reforestation and has commercial value.	Readily
Pine, Scotch (<i>Pinus sylvestris</i>)	Well - Moderately Well	Intolerant	30 ft	110 ft	No	8-16 ft		X		6-12 ft		Fact Sheet	Used in windbreaks as the central or leeward rows of multi-row plantings. Important Christmas tree species. Some wildlife use.	Readily
Pine, Virginia (<i>Pinus virginiana</i>)	Well - Moderately Well	Intermediate	25 ft	70 ft	Yes	6-14 ft	X	X		6-12 ft	6 - 8 ft	No	Native pine used primarily as pulpwood. Provides some wildlife food and cover. Sometimes used in windbreaks and screens.	Readily
Plum, Wild (<i>Prunus americana</i>)	Well - Somewhat Poorly	Intolerant	25 ft	25 ft	Yes	6-14 ft	X		X	8-12 ft		No	Native plum found throughout WV. Common along streambanks and wood lines. Fruit valued by many species of wildlife.	Readily
Poplar, Yellow (<i>Liriodendron tulipifera</i>)	Moderately Well - Somewhat Poorly	Intolerant	60 ft	120 ft	Yes		X		X	10-15 ft	10-15 ft	Fact Sheet	Fast growing. Attractive ornamental but very large. Important timber species in WV. Provides some secondary wildlife food.	Somewhat Available
Redbud, Eastern (<i>Cercis canadensis</i>)	Well - Somewhat Poorly	Tolerant	16 ft	16 ft	Yes		X			5-8 ft		Plant Guide	Many birds, including bobwhite quail, eat the seeds. Honeybees use the blossoms. Often planted as an ornamental.	Readily
Redcedar, Eastern (<i>Juniperus virginiana</i>)	Well - Somewhat Poorly	Intermediate	25 ft	80 ft	Yes	6-14 ft	X	X		8-12 ft		Fact Sheet Plant Guide	Eastern redcedar provides habitat for a variety of wildlife. Specific to limestone associated sites. Cedar-apple rust host.	Readily
Serviceberry, Common (<i>Amelanchier arborea</i>)	Well - Somewhat Poorly	Tolerant	20 ft	50 ft	Yes	6-14 ft	X			8-12 ft		Plant Guide	At least 40 bird species, rabbits, chipmunks, mice, voles, foxes, and black bears eat the fruit. Widely used as an ornamental.	Readily
Spruce, Norway (<i>Picea abies</i>)	Well - Somewhat Poorly	Intermediate	35 ft	120 ft	No	8-16 ft *		X		8-12 ft		No	Important as a windbreak, screen and ornamental. Winter cover for some resident birds. Mourning doves utilize this tree for nesting.	Readily
Spruce, Red (<i>Picea rubens</i>)	Well - Moderately Well	Tolerant	25 ft	110 ft	Yes	8-16 ft	X	X	X	8-12 ft		Fact Sheet	One of the most important timber and wildlife species in North America. Site specific above 3500 feet in eastern counties of WV .	Readily
Spruce, White (<i>Picea glauca</i>)	Well - Somewhat Poorly	Intermediate	30 ft	100 ft	No	8-16 ft	X	X		8-12 ft		Plant Guide	Important as a screen, timber and ornamental. Winter cover and food for some birds. Hybridizes freely. Native to the northeast.	Readily
Sycamore, American (<i>Platanus occidentalis</i>)	Moderately Well - Poorly	Intermediate	65 ft	100 ft	Yes				X	8-12 ft		Plant Guide	Very quick growing and large. Slow decaying leaves. Prone to disease. Found along streambanks and a variety of other sites.	Readily
Sweetgum (<i>Liquidambar styraciflua</i>)	Well - Somewhat Poorly	Intolerant	50 ft	100 ft	Yes	8-18 ft			X	8-12 ft		Fact Sheet Plant Guide	Prefers deep soils for root development. Important as a timber, wildlife and ornamental. Tolerates a variety of sites and conditions.	Readily
Walnut, Black (<i>Juglans nigra</i>)	Well - Moderately Well	Intermediate	35 ft	100 ft	Yes		X		X	10-20 ft	20 X 20 ft	Fact Sheet	Prefers deep well drained soils. Important as a timber and nut crop tree. Produces juglone that inhibits competition.	Readily

* These species may be utilized as stock trainers for high quality timber production.